



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/614,904	07/12/2000	Koichi Funaya	088941/0165	2429
22428	7590	01/12/2004	EXAMINER	
FOLEY AND LARDNER			CHEVALIER, ROBERT	
SUITE 500			ART UNIT	
3000 K STREET NW			2615	
WASHINGTON, DC 20007			PAPER NUMBER	

DATE MAILED: 01/12/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/614,904

Applicant(s)

FUNAYA ET AL.

Examiner

Bob Chevalier

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10, 11, 14, 16, 20, 23-27, 32, 33, 36, 38 and 42 is/are rejected.
- 7) ☒ Claim(s) 6-9, 12, 13, 15, 17-19, 21, 22, 28-31, 34, 35, 37, 39-41 and 43 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,5. 6) ☐ Other: _____

Claim Rejections - 35 USC § 112

1. Claims 23, and 29, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For example:

(1) claim 23, line 4, the expression "the re-encoded audio/video signals" recited thereof is indefinite because there is no recitation of the audio/video signals being previously re-encoded. It is noted that the received audio/video signals are only being encoded, but, there is no recitation in the claim specifying that said encoded audio/video signals are being re-encoded. In other words, there is no antecedent basis for the expression "the re-encoded audio/video signals". Clarification is required. (2)

Claim 23, lines 6-7, the expression "said readout audio/video signals" does not have a clear antecedent basis. Clarification is required.

(3) Claim 23, lines 8-9, the expression "a decoder for decoding... and outputting encoded audio/video signals as the re-encoded audio/video signals" as specified thereof is not clear as to how a decoder would output an encoded signal. Does the Applicant mean to indicate --outputting a decoded audio/video signals--? Clarification is required.

(4) Claim 29, line 1, the expression "said effect information" recited thereof does not have a clear antecedent basis.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 16, 23-27, 38, are rejected under 35 U.S.C. 102(b) as being anticipated by Lane et al.

Lane et al discloses a video recording/reproducing apparatus that shows all the limitations recited in claims 1, and 24, including the feature of receiving compression encoded digital audio/video signals (See Lane et al's Figure 10a, component 342), the feature of re-encoding the audio/video inputs and outputting re-encoded audio/video signals (See Lane et al's Figure 10a, component 308, and column 50, lines 41-48), the feature of accumulating the re-encoded audio/video signals in the recorder (See Lane et al's Figure 10a, component 340), the feature of reading out the accumulated audio/video signals and decoding the readout audio/video signals and outputting processed audio/video signals as audio/video output signals as specified in the present claims 1, and 24. (See Lane et al's Figure 11).

With regard to claims 2-4, and 25-26, the feature of the re-encoder having decoding section for performing decoding of the audio/video signals and having encoding section for compression encoding the decoded audio/video signals and outputting the same as the re-encoded audio/video signals as specified thereof is present in Lane et al. (See Lane et al's column 50, lines 41-48).

With regard to claims 5, and 27, the feature of embedding the reproduction managing information in the audio/video signals as specified thereof would be inherently present in the cited reference of Lane et al. Because, Lane et al discloses that additional header information is added to the video/audio packets and that such additional header information identifies the information pertinent to retrieval during playback operation. (See Lane et al's column 51, lines 1-6).

With regard to claims 16, and 38, the feature of the image resolution conversion filter for converting a resolution of the video signal portion of the audio/video signals and outputting converted audio/video signals as specified thereof is present in the cited reference of Lane et al. (See Lane et al's column 49-66).

4. Claims 1-4, 14, 23-26, and 36, are rejected under 35 U.S.C. 102(b) as being anticipated by Kwon.

Kwon discloses a video recording/reproducing apparatus that shows all the limitations recited in claims 1, and 24, including the feature of receiving compression encoded digital audio/video signals (See Kwon's Figure, component 12), the feature of re-encoding the audio/video inputs and outputting re-encoded audio/video signals (See Kwon's Figure, component 20), the feature of accumulating the re-encoded audio/video signals in the recorder (See Kwon's Figure, component 34), the feature of reading out the accumulated audio/video signals and decoding the readout audio/video signals and outputting processed audio/video signals as audio/video output signals as specified in the present claims 1, and 24. (See Kwon's Figure, components 34, 16, display).

With regard to claims 2-4, and 25-26, the feature of the re-encoder having decoding section for performing decoding of the audio/video signals and having encoding section for compression encoding the decoded audio/video signals and outputting the same as the re-encoded audio/video signals as specified thereof is present in Lane et al. (See Kwon's Figure, components 16, 26, and 32).

With regard to claims 14, 23, and 36, it is noted that all the limitations recited thereof are present in the cited reference of Kwon, including the feature of the plurality of audio/video input signals (See Kwon's Figure, components 12, and 36), the feature of multiplexing and outputting time division multiplexed audio/video signals (See Kwon's Figure, component 14), the feature of decoding the multiplexed audio/video signals (See Kwon's Figure, component 16), the feature of processing and encoding the processed audio/video signals and outputting the same as the re-encoded audio/video signals (See Kwon's Figure, components 20, and 32), and the feature of externally outputting audio/video signals accumulated in the recorder, the selector selects either the readout audio/video signals and outputs the decoded audio/video signals as specified in the present claim 23. (See Kwon's Figure, components 36, 12, 14, and display).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 20, and 42, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwon in view of Lane et al.

Kwon discloses a video recording/reproducing apparatus that shows substantially the same limitations recited in claims 20, and 42, including the feature of the first and second audio/video input signals (See Kwon's Figure, components 12, and 36), the feature of decoding and processed the first audio/video signals (See Kwon's Figure, component 16), the feature of the selector for selecting either the decoded video/audio signals (See Kwon's capability of providing the reproduced signal at component 36, note that the reproduced signal is the decoded signal provided to the recorder via the encoder), the feature of selecting the second audio/video signal (See Kwon's Figure, component 12), and the feature of the encoder for encoding the selected audio/video signal as specified in the present claims 20, and 42. (See Kwon's Figure, component 20).

Kwon fails to specifically disclose the feature of encoding the video/audio signals according to the provided coding parameters as specified in the present claims 20, and 42.

Lane et al does disclose a recording/reproducing which includes the capability of encoding provided video/audio signals according to provided coding parameters as specified in the present claims 20, and 42. (See the capability of prioritizing the data based on its utility for the generation of the trick play data through the coding process, as shown in Lane et al's column 50, lines 30-48).

It would have been obvious to one skilled in the art to modify the Kwon's apparatus wherein the encoding means provided thereof (See Kwon's Figure, component 20) would incorporate the capability of prioritizing the data based utility (that is coding parameter) so as to encode the video/audio data in the same conventional manner as shown by Lane et al. The motivation being to improve the quality of the encoded signal as suggested by Lane et al.

8. Claims 10-11, and 32-33, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lane et al in view of Bruls (EP 0802682).

Lane et al discloses a video recording/reproducing apparatus that shows substantially the same limitations recited in claims 10, and 32, including the feature of decoding the inputted audio/video signals and re-encoded the decoded audio/video signals and recording the same on a recording medium as specified in the present claims 10, and 32. (See Lane et al's Figure 10, components 308, and 342).

Lane et al fails to specifically disclose the feature of the encoder comprising a bit rate controller for generating bit rate control signals in response to vacancy capacity information representing vacancy capacity of the recorder and encoding the audio/video signals in accordance with the bit rate control signals as specified in the present claims 10, and 32.

Bruls does disclose a recording apparatus which includes an encoder comprising a bit rate controller for generating bit rate control signals in response to vacancy capacity information representing vacancy capacity of the recorder and encoding the audio/video signals in accordance with the bit rate control signals as specified in the present claims 10, and 32. (See Bruls' Front page).

It would have been obvious to one skilled in the art to modify the Lane et al's recording apparatus wherein the encoding means provided thereof (See Lane et al's Figure 10a, component 308) would incorporate the capability of an encoder comprising a bit rate controller for generating bit rate control signals in response to vacancy capacity information representing vacancy capacity of the recorder and encoding the audio/video signals in accordance with the bit rate control signals in the same conventional manner as is shown by Bruls. The motivation being to increase the recording density of the recording means as suggested by Bruls.

With regard to claims 11, and 33, the feature of controlling time averaged values to be allocated for coding as specified thereof would be present in the proposed combination of Lane et al and Bruls indicated above. (See the second paragraph of the abstract as shown in Bruls' front page).

Art Unit: 2615

9. Claims 6-9, 12-13, 15, 17-19, 21-22, 28, 30-31, 34-35, 37, 39-41, and 43, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claim 29, would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bob Chevalier whose telephone number is 703-305-4780. The examiner can normally be reached on MM-F (9:00-6:30), second Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on 703-308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.


ROBERT CHEVALIER
PRIMARY EXAMINER

B. Chevalier
January 8, 2004.